Occupational HAZARDS

20080

Articles of Economic Interest to Management

- Large stove manufacturer reports on employee welfare activities.
- Annual Safety Congress.
- Metal-Mining Industry Reduces Accidents.
- Check List on Health and Safety.
- Report on U.S. Defense Program.

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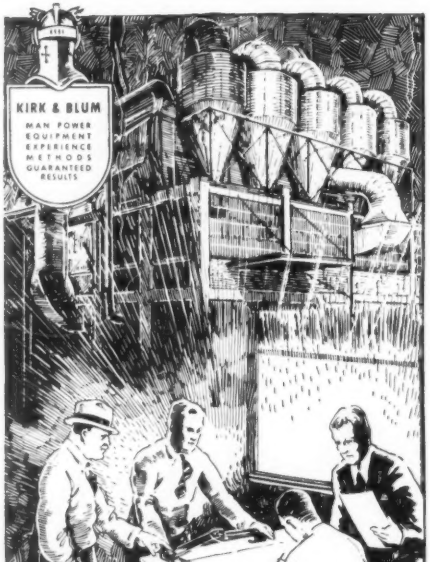
PERIODICAL DIVISION

The only management publication devoted exclusively to the engineering control of:

Dusts • Fumes • Vapors • Gases • Organic Solvents
Dermatitis • Industrial Sanitation
Industrial Health & Safety

KIRK & BLUM

1907—One-third Century of Service to Industry—1940



in ENGINEERING

FABRICATING

ERECTING

Dust and Fume Control Systems

Air Cooling and Ventilating Systems

Industrial Drying and Baking Ovens

Exclusive engineering data, compiled over years of successful experience, enables us to unqualifiedly *guarantee* the exact performance and successful operation of every installation we plan and erect.

Confer with us in regard to your dust, fume, drying and baking problems. No project is too large or too small for our service. We survey your plant and make complete recommendations, without obligation to you. Write for data of our industrial service.

Our Experience is an Open Book

These booklets, containing illustrations and descriptions of successful installations, are sent to interested industrial executives on request.

- Blower Systems for Woodworking Plants
- Dust Collecting Systems for Metal Industries
- Fan Systems for Various Industries
- Cooling Systems for the Glass Industry
- Industrial Ovens

A Liberal Offer For Your Serious Consideration

Let us submit a proposal for installing equipment to increase the efficiency of your plant. It will, in most cases, pay for itself quickly because of economies secured.

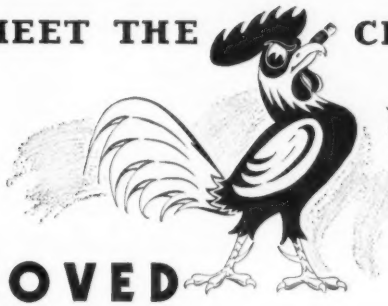
SEND FOR DATA SHEET

Your answer to its questions will enable us to give you complete information—on cost of a system and what it will accomplish in your plant.

THE KIRK & BLUM MFG. CO.

2802 Spring Grove Ave. Cincinnati, Ohio

MEET THE CHAMP!



A TOUGH LITTLE FIGHTER

APPROVED

Willson Respirator No. 5

U. S. BUREAU OF MINES No. 2140

Greater wearing and breathing comfort makes this new WILLSON BANTAM a real contribution to workers' efficiency. It is approved protection for a great variety of dispersoids classified by the U. S. Bureau of Mines as pneumoconiosis (silicosis and asbestosis) -producing dusts and mists; also, nuisance dusts and mists and chromic acid mist.

FOOL-PROOF . . .
Typical of all WILLSON respirators the BANTAM will stand a lot of banging around—no delicate parts to get out of adjustment.

COMFORTABLE . . .
A respirator so light in weight and so easy to breathe thru that it can be worn for long periods of time without causing noticeable discomfort or slowing down of production.

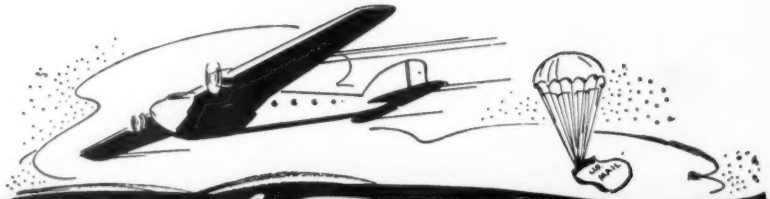
RUGGED, TOUGH and COMPACT...
From headband to exhaust valve, a completely rugged assembly. All rubber facepiece can't be crushed out of shape. Screw type filter assembly can't be put together wrong or bent out of adjustment.

SANITARY . . .
To clean and sterilize the BANTAM, you just remove the long life filter and wash the respirator in soap and water or a disinfecting solution. Filter replacements are inexpensive. New ones can be used as frequently as necessary.

Write your Willson Distributor or drop us a card for full information on the WILLSON BANTAM —the toughest lightweight in any ring!

DOUBLE **WILLSON**
PRODUCTS INCORPORATED
READING, PA., U.S.A. *Established 1870*

GOGGLES
RESPIRATORS
GAS MASKS
HELMETS



Useful Free Literature

The literature briefly described in this department gives important information on products and equipment designed to control occupatonal hazards. Manufacturers' technical executives tell of the features to be found in their goods. Be sure to get all available data through this literature before buying. Note those items desired on coupon below and mail. See pages 32, 33, 34 for New Products.

334—**INDUSTRIAL VACUUM CLEANER—ELECTRIC VACUUM CLEANER CO. INC.**—Illustrated bulletin #352CA gives specifications on the sizes and practical uses of these new industrial vacuum cleaners. Advantages of this new cleaner are stated as ease of handling, proven performance and long life.

335—**MERCURY LAMPS—GENERAL ELECTRIC COMPANY**—Six page illustrated bulletin #Y-0224. Shows actual plant illustrations of mercury lamps in use. Application data and lamp specifications are outlined.

336—**SAFETY EQUIPMENT CATALOGUE—SAFETY CLOTHING AND EQUIPMENT COMPANY**—90 page catalogue liberally illustrated, covering complete line of industrial safety clothing and equipment manufactured and distributed by this company. Descriptions of safety items clear and concise.

337—**DOUBLE LIFE INDUSTRIALIZER SHOES—CRADDOCK TERRY SHOE COMPANY**—8 page bulletin in which a diagrammatic drawing of their new shoes is made. All features are pointed out individually and numerous styles shown.

338—**FAN AND HEATER CATALOGUE—AMERICAN BLOWER COMPANY**—Convenient, pocket size, very well gotten up catalogue, describing this company's varied line of equipment. Selections of equipment can be made from the information given.

339—**SCALE AND RUST REMOVERS—OAKITE PRODUCTS, INC.**—20 page bulletin describes how a new material possesses unusually high scale and rust removing properties. Oakite Compound #32 provides safe, effective results in scaling engine cooling systems, heat exchangers, compressors and other types of water cooling equipment.

340—**DUST REMOVAL—DRACCO CORPORATION**—8 page bulletin #302 discusses the advantages of the various types of Dracco dust control apparatus. Illustrations, engineering sketches and attractive layout make this a valuable piece of literature.

341—**LOCALIZED LIGHTING — FOSTORIA PRESSED STEEL CORP.**—Catalogue ML-25 describes the many styles of localized lighting fixtures manufactured by this company. Catalogue should be of interest to all Production Executives.

342—**NON-SLIP PAINT—UNITED LABORATORIES, INC.**—A laboratory report and demonstrating panel outlining specifications and uses for Armor-Plate, a new non-slip paint.

343—**SALT TABLETS—INTERNATIONAL SALT COMPANY**—A bulletin describing the need for salt usage by industry throughout 12 months of the year.

FREE LITERATURE COUPON Clip out and paste on postcard or enclose in envelope.
Mail to: OCCUPATIONAL HAZARDS, 812 Huron Road, Cleveland, Ohio.

Nos. of desired items .....

Firm Name .....

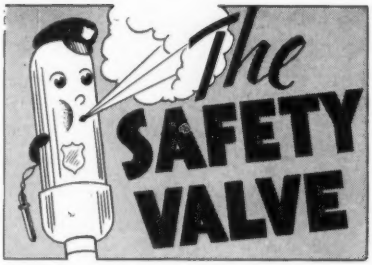
Your Name ..... Position .....

Street and Number of Your Firm .....

City ..... State .....

FL-25

Only
If the Safety Shoe Fits
will they Wear It!
Proper fitting of Safety Shoes is vital—men simply won't wear them if they pinch, bite, chafe—or if their feet "swim" in them. Thom McAn Safety Shoes have two-fold fitting leaderships. First, they are made over Thom McAn's special lasts, developed through thousands of scientific measurements of actual human feet. Second, they are fitted by Thom McAn's own trained fitters, each of whom fits thousands of feet every year. Men gladly wear these Safety Shoes, as we have proved in hundreds of the Nation's leading plants where the Thom McAn FREE Foot Safety Plan is operating. Thom McAn, and only Thom McAn, offers such a plan. Write for full details today.
Thom McAn
Make this store your Safety Shoe Department.
It is one of the 650 THOM McAN STORES —in 350 cities.
THOM McAN: SAFETY SHOE DIVISION
555 FIFTH AVENUE, NEW YORK, Dept. D-9
Without obligation, please send me full details of your Foot Safety Plan. If you will stock Safety Shoes for our plant in your own stores, at no risk or expense to us, and have your own trained men fit them, I want to know all about it.
Company Name
Company address
Executive's name



Safety Congress Meets in Chicago

Men from all over the country will assemble at the Stevens Hotel in Chicago on October 7-11 to attend the annual Safety Congress.

This year's event takes on signal importance because of the great increase in industrial activity.

The growing importance of employee health standards is indicated by a special panel discussion on occupational disease problems, Wednesday morning, October 9th.

The panel will discuss:

1. Health hazards in spray painting.
2. Fatigue and its relation to occupational diseases.
3. The toxic limits of common solvents.
4. Lead in industrial processes.
5. Skin infections.
6. Should occupational diseases be considered as industrial injuries.

Leaders in various phases of safety work will also lead discussions on their specialties.

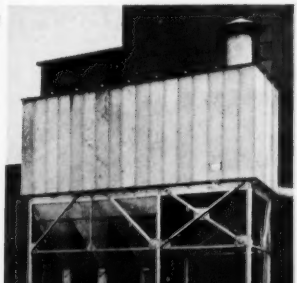
Another significant part of the Congress is the manufacturers' exhibit. Over 125 leading firms in the field will present their newest products.

for SAFETY
KEEP PLANT AIR FREE OF DUST!

And to do it at lowest cost Use Parsons Dust Control.

The Parsons Oval Bag Dust Arrestor eliminates dust COMPLETELY—and there is no let-down in its efficiency because it will not plug due to moist conditions.

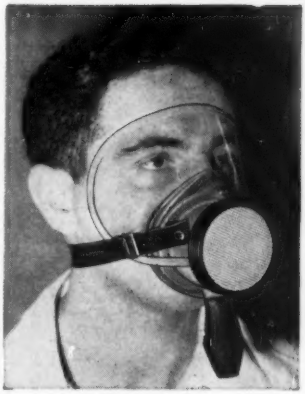
It is extremely economical to operate—and ruggedly built for long service. Write for Bulletin DA-6.



A recent Parsons installation removing various dusts from the manufacturing operations of a mid-western plant.

PARSONS DUST CONTROL
Parsons Engineering Corporation, Cleveland, Ohio

FORTIFY FOR SAFETY!



Don't let Accidents "sabotage" your production!

With the Defense Program demanding full speed ahead—guard your plant against accidents which interrupt schedules and disable valuable skilled workers.

Stop accidents BEFORE they happen, by safe-guarding all "danger spots" and hazardous operations in your plant with proven PULMOSAN SAFETY EQUIPMENT.

EYESHIELD-RESPIRATORS

Combines a Plastic Eye-shield with Pulmosan Respirator, to provide protection for the eyes against dusts, splashes or particles. Eyeshield weighs only ½ ounce, easily removed. Many models.

NO. 650 HEEL GUARDS

For workers in shipping rooms, docks, warehouses, etc., to protect rear of ankles from injury by hand trucks and similar vehicles. Light, sturdy, inexpensive.

EVERYTHING FOR INDUSTRIAL SAFETY

Pulmosan is ready with complete stocks of "everything for industrial safety" for every hazard, every occupation, every industry. WRITE TODAY FOR OUR BIG, COMPLETE CATALOG.

At the Safety Congress—

VISIT BOOTHS 91-92

PULMOSAN SAFETY EQUIP. CORPORATION

DEPT. OH, 176 Johnson St., Brooklyn, N.Y.

SEND NOW for

1. What is the greatest obstacle to be overcome in getting workers to wear safety shoes? How can it be overcome?

2. What would it cost me to carry a stock of safety shoes?

These and countless other questions on foot safety are answered in the WHOLE STORY.

Written to give you as complete, yet concise, a story as possible on safety shoes, this new booklet will also give you many worthwhile ideas for your own foot safety program.

A copy is waiting for you free of charge, without obligation, of course. Just fill out the coupon below and drop it in the mail.

HY-TEST DIV: International Shoe Co., St. Louis, Mo.
Please send, free of charge and without obligation, a copy of "The Whole Story."

Name _____

Name of Plant _____

Address _____

HY-TEST
INTERNATIONAL SHOE CO.
SAFETY SHOES

Occupational HAZARDS

OCTOBER 1940

Volume 3 Number 1

CONTENTS

	Page
Manufacturers' Literature	2
The Safety Valve	4
The Malleable Iron Range Company's Health & Safety Activities	8
How the Metal-Mining Industry Keeps Its Workers Healthy	12
Check List on Health and Safety	14
Thirty-Three Years in Business	17
This Month in Washington	18
The Dust Hazard in Foundries	24
Right Off the Docket—A Legal Review	28
New Products in the Field	32, 33, 34
Prevention of Industrial Eye Accidents	35
Facts of Interest to the Field	36

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Irving B. Hexter, President — L. P. Aurbach, Vice-President
Jack Weiss, Associate Editor — William S. Papworth, Associate Editor

Stove Manufacturer Contributes to Employees' Welfare

How ventilating equipment, dust control apparatus, sanitation facilities and safety devices keep workers happy at Malleable Iron Range Company.

By E. P. Gallenbeck, Safety Director, Malleable Iron Range Company Beaver Dam, Wisconsin

MEN charged with the responsibility of successful plant operation have often asked me how our firm approaches the dual problem of occupational disease prevention and economical control of industrial accidents. This article is the answer to that question.

First of all it must be remembered that an employee welfare program is composed of two main parts:

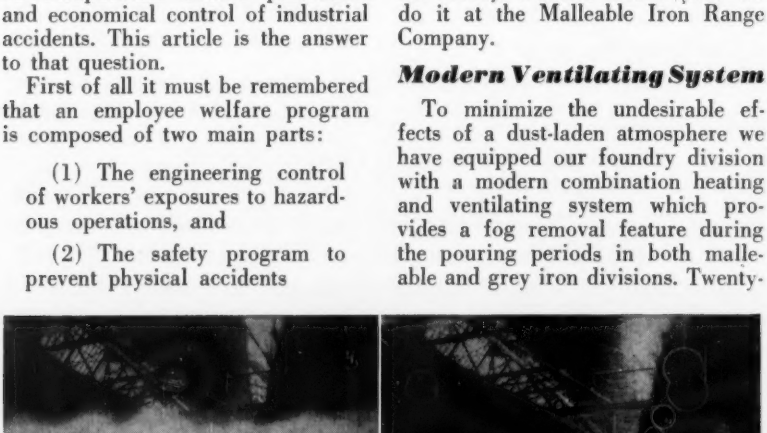
(1) The engineering control of workers' exposures to hazardous operations, and

(2) The safety program to prevent physical accidents

Considering both these factors you come to the inevitable conclusion that a healthy worker is a safe worker—and a more productive and less costly worker. Here's how we do it at the Malleable Iron Range Company.

Modern Ventilating System

To minimize the undesirable effects of a dust-laden atmosphere we have equipped our foundry division with a modern combination heating and ventilating system which provides a fog removal feature during the pouring periods in both malleable and grey iron divisions. Twenty-



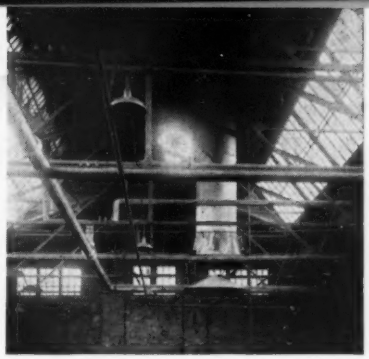
An unusual comparison of before and after fog conditions in Malleable's molding department. Circles indicate points at which ventilating fans are located.

six grid unit heaters with circulating fans draw in the cold air from outside the building, force this air through the unit heaters at a lower temperature than room temperature, and this colder and drier air circulation absorbs the smoke and fog arising from the hot molds during the pouring period, clears the atmosphere in the room and provides fresh air for employees during this strenuous period. Heavy duty industrial vacuum cleaners are used constantly throughout the plant to remove dust from the building structure, proper, pipes, windows, and steel girders. They are also used on floors that are too hard to clean with a broom.

Ventilating fans are used in every department and individual man cooling fans are provided for operations near furnaces.

All spraying, grinding, and polishing equipment is provided with sufficient dust collectors. Dust counts are made regularly to determine whether or not the exhaust systems are working properly. Harmful fumes from chrome plating tanks, pickling tanks, soldering lines, etc., are exhausted out of all buildings. Spray booths in the vitreous enameling department have running water curtains at rear and bottom. Tables for brushing vitreous enamel parts are also connected to a water-washed exhaust system. Girls are employed at these tables to brush enamel from panels, and the system works so perfectly that the girls do not wear any headdress to protect their hair.

All of our installations for the elimination of dust, fumes and vapors have been approved by the Industrial Commission of Wisconsin as fully complying with their code.



Above—View of ventilating stack.

●

Below—Enamel brushing tables connected to a water washed exhaust system.

Below—Note ventilating fans used to increase comfort of employees working near enamel furnaces. Temperature is 1700 degrees.

Clean Spray of Running Water for Each Person from Central Sprayhead.

Here is the Wash Fixture for YOUR Plant

These Group Type fixtures save floor space and reduce water consumption by 70%. The 54-inch circular model serves 8 to 10 persons simultaneously—yet only three piping connections are required—hot water, cold water and drain. Each *single-person* conventional wash basin requires the same number of piping connections or to serve the same number of persons 8 to 10 of these basins are required and 24 to 30 piping connections. Installation and maintenance of Bradley's are low and combined with water savings they pay for themselves in a short time. If you have 25 or more employees, they are the fixtures for *your* plant, too.

Let our Washroom Consultants make a survey of your washing facilities. Let us mail you our helpful new Booklet "Washroom Layouts" containing floor plan suggestions. BRADLEY WASHFOUNTAIN CO., 2259 W. Michigan St., Milwaukee, Wisconsin.

BRADLEY
WASHFOUNTAINS

Sanitation Facilities Important

We have a large shower equipment installation with lockers for the well-being of our employees. Drinking fountains are distributed throughout the plant, so that every employee has access to a fountain within thirty feet of his working place.

Accident Prevention Technique

The success of our accident prevention program is borne out by our unusual safety accomplishments. For 8 successive years we have compiled a record of 1.44 lost time accidents per million hours. Our experience proves that constant watchfulness and personal contact is the answer to accident prevention. The main factors which have contributed largely to this safety program are as follows:

No. 1—The synchronizing of production and safety. Our employees are instructed to perform their work safely or not at all. We make it very plain to all that safety must have first consideration and increased production second. Our production department Creed is—Safety, Quality, Production.

We find that the problem of maintaining interest in safety is the same as maintaining interest in quality, efficiency, good-housekeeping or production. Accidents must be analyzed, causes determined, responsibility placed and the lessons emphasized to prevent reoccurrences. This procedure must be followed day in and day out if we expect to reach our goal of "No accidents." We know that repeated safe thinking and repeated safe acting on the part of a foreman or any other employee will in time form safety habits of thought and action which will become almost instinctive reaction to hazard and

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danger. One of our prize slogans is "Make Safety a Habit."

No. 2—Our Foremen accept full responsibility for accidents in their departments. They are judged by their accident record as much as by their production and cost records.

A good safety record indicates that the foreman is interested in the welfare of his men, has his men well-trained, keeps his department in good order and his mechanical equipment in safe operating condition.

Other Foundry expenses such as supplies, bricksand, scrap castings receive considerable attention by the foreman, but in many foundries the large cost of lost time accidents is passed over lightly or concealed entirely. Our safety work pays large dividends because our foremen make accident prevention an important part of their job.

No. 3—Our Safety organization is a representative group including a General Safety Committee, Inspection Committee and First Aid Department.

This General Safety Committee has 28 members and includes every foreman in the organization. The minutes are posted on all bulletin boards so that every employee may know just what safety recommendations have been approved for completion. Every member has a copy for his own use. The success of our safety work is due largely to the work of all our foremen on this committee and our efforts to operate without a lost time injury for a new and longer period and thus establish a new safety record.

The Inspection Committee consists of three members of the General Safety Committee. It is their duty to inspect the entire plant weekly. Any

(Please turn to page 35)

OIL DERMATITIS —?— WESCOL!

• **WESCOL** is a powerful disinfectant guaranteed to be 18 times as strong as pure carbolic acid when tested against a vigorous culture of B. Typhosus by the Hygienic Laboratory Phenol Coefficient Method of the U. S. Public Health Service, or the F.D.A. Method of the U. S. Department of Agriculture.

• **WESCOL** is used in cutting oils and compounds and helps keep the material sterile and assists in safe-guarding workers against oil dermatitis.

• **WESCOL** does not change the efficiency of the material in which it is used and will not injure its cooling properties.

• **WESCOL** is economical to use because only one pint is necessary for each 50 gallons of cutting oil (ratio, 400:1) to accomplish its purpose.

• **WESCOL** has proven its great value to many large industrial plants and factories in cutting down oil dermatitis infections and reducing compensation losses.

Send for free booklet for more detailed information.

WEST DISINFECTING CO.

42-16 West St., Long Island City, N.Y.

Products for the Promotion of Sanitation

West Disinfecting Company
Dept. OS, 42-16 West St., Long Island City, N.Y.

Please send your free booklet on WESCOL.

Name ..... Position .....

Company .....

Street & No. .....

City & State .....

Health and Safety Educational Plan for the Metal-Mining Industry

By J. J. Forbes, Supervising Engineer
Safety Division, Bureau of Mines

THE accident rate for metal mining in the United States has shown decided improvements in the past 30 years. During the 5-year period 1911 to 1915, an average of 630 men were killed in our metal mines per year, and during the 5-year period 1933 to 1937 the average yearly death toll had been reduced to 159. Although this reduction in the death rate is splendid, too many men are still being killed in our mines. Metal-mining accidents can be prevented as has been amply demonstrated by a number of companies that have gone long periods without a disabling accident.

Typical group of metal-mining employees receiving health and safety educational data.

The story of how a well organized activity can bring about health and safety advances.

The first major development in the great industrial safety movement was a realization of the necessity for safeguarding against electrical, mechanical and natural hazards which existed within the industry. I re-

"Indian Summer" brings **THERMOPLEGIA**

The heat plague which costs industry a heavy toll in lowered workers' efficiency and health

SWEAT is impolite but necessary. Cut off a man's ability to sweat and death soon follows. Yet workers must replace the salt as well as water lost in sweat, or else muscles tire, efficiency drops and, in extreme cases, cramps or spasms result. Winter and summer, people perspire. "Salt balance" must be maintained, and Sterling Salt Tablets help maintain it as physicians recommend. Salt Tablets contain refined salt, compressed into convenient, easy-to-take tablets for quick absorption of needed salt. Ask your supplier, International representative or write to International Salt Company, Incorporated, Scranton, Pa.

• SalTabs dispensers: for 1,000 tablets $4; for 500 tablets $3.25. SalTabs are made of refined salt—also available made of 70% refined salt and 30% dextrose; in bulk lots or boxes of 1,000.

Quick-Acting

Sterling SALT TABLETS

REG U S PAT OFF

fer to such safety devices as guards for moving machinery handrails, safe walkways, safe ladders, fire-fighting equipment, and protective wearing apparel, including safety shoes, hard hats, and goggles. Today such equipment is generally regarded as essential to the operation of the industrial plant or mine and is provided and used largely as a matter of course.

Next comes the development of plant safety organizations, including supervisory officials, safety committees, safety rules and regulations, investigation of accidents, and numerous other features which bring accident prevention to its rightful place in importance with production, cost, engineering, and sales.

In spite of all that has been accomplished in the development of safety in the metal in the metal-mining industry, accidents continue, resulting in too many fatalities and injuries to workers. Obviously there is still a missing link in the safety chain which we have thrown about our workers in the metal mines to protect them from accidents.

The Holmes Safety Association

The United States Department of the Interior, Bureau of Mines, in cooperation with state agencies interested in the promotion of safety in the mineral and petroleum industries, has for many years sponsored a national safety organization known as the Holmes Safety Association, which has for its objective the following:

(Please turn to page 39)

Check List on Health and Safety

THOSE who are directly concerned with making working conditions safe and healthy may find use for the check list published in a recent issue of the *American Federationist.* Asking its readers what they as unionists are doing to make their jobs and workplaces safer and healthier, the article notes the following things to watch for:

1. Do many people get hurt in your workplace? How do they get hurt?
2. Is there much sickness? What kind? How much of it is due to the job?
3. Does your trade or craft have any special work hazards? If so, what precautions are you taking against them?
4. Is the power-transmission machinery at your workplace properly guarded? What constitutes proper guarding?
5. Is the point of operation in the processing machinery (woodworking machines, punch presses, welding, machine tools) properly guarded? What constitutes proper guarding?
6. Are the workers at machines properly guarded against overhead cranes, hand and power-driven floor trucks, industrial railways, automobile trucks, and other kinds of plant transportation?
7. Are time and motion studies, Bedeaux or other schemes to set rates of pay, made with all necessary guards in place and in conformity with all safety rules?
8. Is your plant structurally safe for the work that is done there?
9. Are the floors smooth, free from broken boards, free from hidden stairways or ramps?
10. Do the stairs have equal risers and treads? Are the risers uncomfortably high? Are the treads dangerously narrow? Do the treads have a nonslipping surface? Do the stairs have proper handrails? Are the stairs well lighted?
11. Are the ladders you use built to conform to safety requirements? Are they properly maintained?
12. Are overhead runways and galleries properly supported? Do they have adequate guard rails?
13. Is the air kept free from dusts, fumes, vapors, gases, and mists?
14. Do you have to strain your eyes to see what you are doing or where you are going?
15. Are the materials stored and piled so that they will not fall down on you?
16. Is your plant kept clean? Who pays for the cleaning? Are the floors free of disorderly piles of material?
17. Is the overhead structure kept clean and free from dust, dirt, and other accumulations?
18. Are the windows kept clean? Are broken window panes replaced?
19. Are approved-type goggles and other personal protection provided when you are exposed to hazards at your work?
20. Does the drinking water meet your local and state health requirements?
21. Do you have a place to store your lunches that is free from rats and vermin and that is clean and ventilated? Is the place where you eat your lunches away from the workroom, and is it kept clean?
22. Is the place where you change your clothes clean and well lighted and ventilated?
23. Do you have plenty of hot and cold water and soap to clean up with before you leave the plant?
24. Are the toilets well lighted and ventilated? Do they conform to the local and State health rules? Are they kept clean?
25. What practical help can your labor department give you in improving the safety and health conditions in your plant?
26. Does your plant have a safety program? Does the management consult with unions when it draws up safety and health rules?
27. What safety and health provisions do you write into your trade agreements? What ones can you not afford to trade off under any circumstances?
28. Are your members thoroughly in sympathy with the safety rules, and do they follow them? What do you do to see that your members follow these rules?

Additional copies of this list available from the Editor, Occupational Hazards, Cleveland, Ohio.

ALL Jackson cover-all type C-Line Eyeshields are well ventilated, non-fogging, fire-resisting. Light in weight, they fit the head comfortably. Visors are easily adjusted at *any* angle. Standard visor depth, 4"—others up to 9". Available in five shades—clear, smoked, amber, light and dark green.

Type C-5, illustrated here, has full metal binding and a spark deflector that protects the forehead without checking ventilation. This is one of ten types of Jackson C-Line shields that provide workmen with wide, clear, undistorted vision and complete protection at innumerable hazard points in industry. All are illustrated and described in our eyeshield folder which we will gladly send upon request.

If your dealer can't supply you with genuine Jackson Eyeshields, please write to us.

JACKSON ELECTRODE HOLDER CO.
Department 0-1
15122 Mack Avenue Detroit, Michigan

THE 1941 LINES

with the rust-proofed STEEL SAFETY BOX TOE at the Nat. Safety Congress

7084 (illustrated) comfortable black calfskin oxford, oak leather sole, rubber heel, and that indispensable "ounce of protection" —the steel Safety Box Toe.

SAFETY FIRST SHOE COMPANY
Holliston Mass.

SAFETY FIRST SHOES

Union Made by Expert New England Craftsmen for Over 35 Years

Dr. Sayers Named to Head U. S. Bureau of Mines

Dr. R. R. Sayers, chairman of the American Standards Association Committee on Standard Allowable Concentrations of Toxic Dusts and Gases, and formerly senior surgeon of the Public Health Service, has been named Director of the U. S. Bureau of Mines.

Dr. Sayers is vice-chairman of the Subcommittee on Pneumoconiosis of the Correspondence Committee on Industrial Hygiene, International Labour Office.

He has been active in the work of the American Standards Association for some years, as a member of the Safety Code Correlating Committee and the Building Code Correlating Committee, and of several technical committees.

Finch Distillery Cited for Safety Achievement

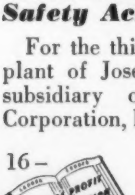
For the third consecutive time the plant of Joseph S. Finch & Co., a subsidiary of Schenley Distillers Corporation, located at Schenley, Pa., has been cited as the safest plant in the beverage industry.

During 1939 the Finch plant had a low accident frequency of only 5.05 lost-time accidents per million man-hours of exposure, as compared with an average 11.83 accidents for the distilling industry as a whole. The company placing second in low frequency had a rate of 9.36, while the third was placed at 28.03.

Employees at the Finch plant, distillers of Golden Wedding, worked 1,387,000 man-hours during the year and suffered only seven disabling accidents. This was a marked improvement over the 1938 frequency of 5.43, and the 1937 rate of 5.25.

Not Wearing Safety Shoes

An electrician's helper was replacing a man hole cover which was about 32" in diameter. He placed the cover at the edge of the man hole and as he was putting it into place it slipped and fell on his foot. He fractured the great and second toes of his left foot. Safety shoes would have prevented this accident.



CLAIMS FOR **FALLS** EXACT A TREMENDOUS TOLL ON INDUSTRY

REDUCE FALLS *with* ARMOR-PLATE

Armor-Plate is a paint with an "emery-cloth" texture which forms an abrasive plating of a refractory nature when applied. This formation defies destruction and becomes slip-proof eight hours after brushing.

America's leading firms are successfully using Armor-Plate to control the slipping hazard in their plants, thereby reducing their insurance costs.

Its uses are manifold. Laboratory Report #419 outlines the many advantages, gives application data and cost figures.

A demonstrating panel is included in the report. Armor-Plate, available in six attractive colors, can undoubtedly be used in your plant. Send coupon for full details.

UNITED LABORATORIES, INC. - CLEVELAND, OHIO
Canadian Licensee—Northern Paint & Varnish Co. Ltd., Owen Sound, Canada

UNITED LABORATORIES, INC.
Dept. O-H, Euclid Ave., Cleveland, Ohio
Please send me your CERTIFIED LABORATORY REPORT giving full data on ARMOR-PLATE, the slip-resistant coating, together with demonstrating panel. No obligation.
Name of Individual_____
Name of Company_____
Street & Number_____
City and State_____

One-Third of a Century of Service to American Industry

Outstanding among firms engaged in the manufacture and application of equipment designed to reduce occupational diseases is The Kirk & Blum Manufacturing Company, Cincinnati, Ohio. This organization is now celebrating its third of a century of business. Starting in May 1907 with a modest shop and an ambitious idea, the company has gradually built up and expanded its services to industry. It now occupies a plant where two acres of floor space is equipped with modern machinery much of it built for the particular requirements of Kirk & Blum. The organization numbers some two hundred men, including: a research, drafting and engineering staff; and field erecting crews.

This firm has specialized in the planning, fabrication, and erection of dust control systems, ventilating and cooling systems and, since 1924, industrial drying and baking ovens.

As industry has adopted new processes and materials, and as new legal requirements imposed by welfare legislation have appeared, Kirk & Blum has kept pace with new developments in its own products.

The company has issued a series of booklets illustrating its equipment and installations in various lines of industry. These, available to interested industrial executives on request, are: "Blower Systems for Woodworking Plants"; "Dust Collecting Systems in Metal Industries"; "Fan Systems for Various Industries"; "Cooling Systems for the Glass Industry"; "Industrial Ovens."

This month in *Washington*

By W. T. CAMERON, Chief Safety Adviser, Division of Labor Standards, U. S. Department of Labor

Safety in Defense

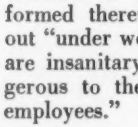
National Program Gets Under Way

WITH its national organization virtually completed, the National Committee for the Conservation of Manpower in Defense Industries is rapidly swinging into action with its program for the prevention of industrial accidents and occupational illness among plants engaged in defense production work.

The program, discussed in this column last month, centers around those industrial concerns which have contracts with the Government and which are subject to the provisions of the Walsh-Healey Act. This program is concerned with the safety and health provisions of the Act which provide that no part of the contract or any of the work performed thereunder shall be carried out "under working conditions which are insanitary or hazardous or dangerous to the health and safety of employees."

It should be emphasized, however, that although the foregoing legal basis exists for requiring adequate safety and health measures in plants working on government contracts subject to the Act, the work of the National Committee is entirely voluntary and the plan is based upon the rendering of the skilled safety advisory service of industrial safety experts to contracting establishments at no expense.

The National Committee has pointed out that under the Defense Program the United States cannot afford interruptions due to the loss of service of trained men in industry through accidents and diseases. Particularly important at a time like this is the fact that normally more than sixteen thousand deaths and one and one-half million disabling injuries occur in American industry annually which result in a production loss amounting to approximately one and one-half billion man-hours. Under the



increased pressure resulting from national defense needs, the hiring of new workers, the calling back into industry of older workers who have lost skill through inactivity, the placing into service of marginal machinery and equipment—all of these tend to enhance and increase the accident and disease hazard in American industry.

A graphic example of what can happen to industrial safety under a program of increased production is offered by the official statistics of the Workmen's Compensation Board of the Province of Ontario which show that during July of this year the number of accidents reported was 7,902 as compared with 2,542 for July of a year ago. This trebling of industrial accidents is attributed by the Board to the following causes resulting from demands for increased production occasioned by war conditions: (1) New employees; (2) lack of proper instruction concerning work to which men were unaccustomed, either on new or existing machines; (3) increased pressure of work on those already employed; (4) lack of adequate supervision.

This is the type of thing that the program of the National Committee is designed to prevent insofar as the skilled accident prevention techniques developed by American industrial leaders can do so.

Supplementing its plan for plant visits, the National Committee is issuing from time to time certain printed material of a highly practical nature pointing the way toward reduction of accidents and occupational sickness. Special Bulletin No. 1, referred to in this column last month, is directed principally to the employer and contains high-lighted information on physical safeguarding and plant safety organization. This bulletin is available for distribution and may be had upon request to the Superintendent of Documents, Government Printing Office, or the Division of Labor Standards, U. S. Department of Labor, Washington.

Special Bulletin No. 2, entitled "The Worker's Safety and National Defense," has just gone to press. It is directed mainly to the worker and, after pointing out the responsibility of the worker in keeping himself fit and ready to report to his job each day, lists a number of detailed sug-

New Miniature Respirator for

NUISANCE DUSTS

- Handy as a pair of glasses.
- Can be worn with goggles.
- Does not hinder eating or talking.
- Has 9 sq. in. filtration area.
- Patented valve exhausts stale air.
- Rubber nose piece fits any nose.
- Unbreakable!—Weighs only 1 OUNCE!
- Dozens of uses in every plant.
- LOW PRICED, only $12.00 per dozen.

Sample DUPOR No. 1 Sent Postpaid $1.00

H. S. COVER

333 Chippewa St. South Bend, Ind.

FEET CATCH HELL IN ID

are rare where LEHIGH SA TY

Cr-runch went this shoe as locomotive and box-car couplings crashed together on it. Toes would have been crushed off except for Lehigh shoe ...but toes and instep were only badly bruised.

Occasionally equipment fails and an "unavoidable" accident occurs. But far more often, accidents are preceded by a thoughtless deed, a careless step, or some infraction of sound safe-practice rules. *One out of every four* industrial accidents hurts a workman's feet or toes. But such injuries are rare wherever Lehigh Safety Shoes are on the job! Silent...invisible...the armorplate steel box built into every pair of

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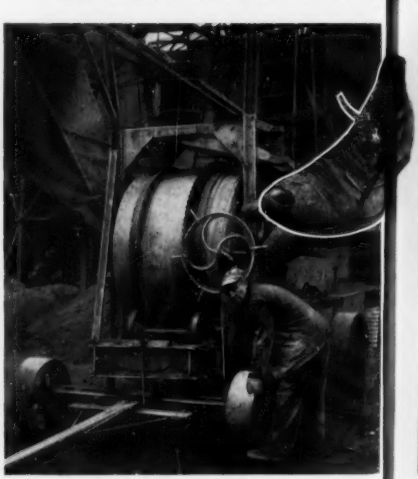
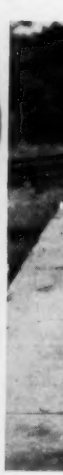
LEHIGH SAFETY SHO CO. I

Watch your step is a sound slogan! 5000 lb. wire wagon bumped over man's toe as he stepped in its path. But broad wheel only bruised his instep!



Safety shoe wins in battle with 2½ ton cement mixer! Wheel crunched right over man's foot. Steel toe bore up under bone-crushing weight, and man was back on job in 5 minutes, unhurt.



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I INDUSTRY... but toe injuries

SAFETY SHOES are on the job!

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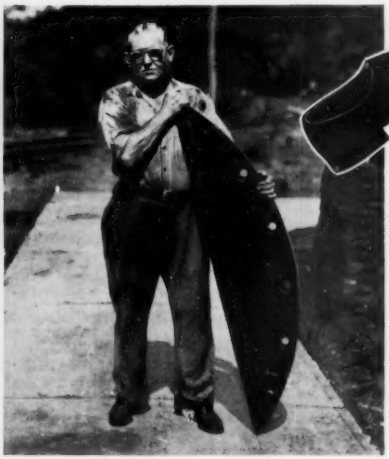
Lehighs is a "bombproof shelter" above the wearer's toes. And these photos, taken from hundreds in our files, show how this steel toe works ...night and day...in hundreds of different industries...keeping *men's* toes safe from harm; saving precious man-hours; holding compensation costs *down*. If you'd like to make 1941 a banner year for foot safety in your plant, *write us today* for a complete catalog and prices!

Old man trouble gets his walking papers as these unsafe shoes, revealed by periodic inspection in this plant, are replaced with husky, new Lehighs.

SHOCO. INC. • ALLENTOWN, PA.

cement
's foot
weight
unhurt



Slips don't count! 300 lb. casting slipped, crashed full-length on this man's toe, but merely ripped leather toe cap of his Lehigh safety shoe. Man's toes weren't even bruised!

Toe mashed into flooring as 2½ ton ring dropped on rigger's foot when he slipped as heavy piece of hydro equipment was being lowered. Man's toes were unhurt!

Make Your STEPS and Corridors SAFE!

Wherever feet tread there is one covering material that means PERMANENT SAFETY . . . MELFLEX Safety Flooring assures longest life and greatest frictional resistance. Melflex prevents slipping wet or dry. . . . It reduces accident claims. . . . Write for complete information.

Melflex Products Company

L. E. Warford, President

222 Merriman Road, Akron, Ohio

gestions for working safely. Among the safety rules which are listed, the following subjects are included: Personal protection, machinery, hand tools, ladders and scaffolds, material handling, storing and piling, mining and tunneling, construction work, and highway transportation. This leaflet will be available shortly from the sources mentioned above.

The part that Labor can play in the Defense Program is described in the bulletin in the following words:

"America's Number One Rush Job is national defense. It's the job of the century—a 50 million manpower task! Every worker in the land has a part in it, even though all of us may not be actually making munitions or tanks or planes. All hands are needed—in the factories, the shipyards and arsenals, in construction, on the railroads, in mines and oil fields, on the farm, in fact, all production.

The manpower of America guards America's national security. But manpower is not measured by census figures. Our production—as well as our livelihood—depends upon people who are fit for the job.

For ourselves—for our families—and for national defense—we must conserve our skill, our strength, our manpower. Every industrial worker today is needed for production. If the defense program is to be carried through on time, we must guard more than ever against industrial accidents and diseases. We can't afford to waste American manpower.

Just what do we mean by waste of manpower? We mean the tremendous loss of life, eyes, arms, legs from industrial accidents and occupational diseases.

"Losses Are Tremendous"

More than 16,000 men and women killed, and a million and a half seriously injured. But 1939 was no exceptional year. That is about what American workers lose in life and limb every year.

Worst of all, of course, is the permanent crippling of workers, the suffering of the injured worker's reduced earning power and lower standards of living for families who depend on them.

Then there is the loss of the production and the loss of labor skill that could build all the things that America needs. Last year, accidents and disease deprived the country of a billion and a half man hours of production. We could not afford that last year; we certainly cannot afford it this year or the next.

And, if we aren't careful casualties will be skyrocketed.

Of course, the employer has the primary responsibility; he must prevent industrial accidents and diseases by providing a safe and healthful plant and safe machinery and equipment to work with. But that is not the whole story. The worker has a share in this responsibility.

PLANNED PREVENTION PAYS!

LAN-O-KLEEN.... The New
Hand Cleaner
plus WEST
PROTECTIVE
CREAMS
You will agree that proper personal cleanliness is the most important step in combatting occupational skin diseases. The most satisfactory cleanser is one that cleans the skin thoroughly and yet is not irritating. LAN-O-KLEEN has as its base corn meal in which has been impregnated a high percentage of Lanoline Oil. LAN-O-KLEEN contains no grit, pumice, caustics and does not tend to irritate the skin.
constitute a most effective combination to help control occupational skin diseases due to external irritants.

WEST DISINFECTING COMPANY

West Disinfecting Co., Dept. OS, 42-16 West St., Long Island City, N.Y.
Please send me a sample of Lan-o-kleen

Name ..... Firm .....

Address ..... City & State .....

Clinic Called

The 1940 clinic of the National Time and Motion Study Clinic will be conducted by the Industrial Management Society, Nov. 8 and 9 at the Chicago Towers Club, Chicago, Ill.

Use of Solvents Causes Dermatitis

A worker who was repairing a gas engine used at various times naphtha, kerosene and benzine with which to clean the oil and dirt from his hands, after he had finished working. A severe dermatitis resulted that caused several weeks' lost time.

To prevent further cases, strict instructions have been given all employees against the use of these solvents, and hand cleaning soap has been provided for them. In providing the soap it was stated that the reason for this was to make certain that the workers would not purchase cheap soap that might cause similar infections.

Standard Oil Gets Safety Awards

Fifteen safety awards have been won by employees of the Standard Oil Company of Indiana from the American Petroleum institute.

Each award recognized success in preventing accidents in a different branch of operations for 1,000,000 or more man hours of work without loss of time or disabling injury because of accident.

Eleven of the awards were won by employees in the Standard refinery at Whiting, Ind., the largest complete refinery in the world and holder of the world's safety record for refineries.

The Dust Hazard F

By L. M. MERRITT, st Cont
Ohio Indust Commi

THE shakeout is generally the dustiest operation in the foundry. It may be done by hand or mechanically.

Moulds without jackets are often dumped on a pile by the workman. Usually they are just turned over. Then the workman does not have to get his nostrils in the rising cloud. He does get the effect when he retrieves the castings from the sand. **It is recommended that all men handling moulds and castings, as described above, be required to wear respirators.**

Mechanical shakeout methods vary. Sometimes it may be removed from hand separation only in that the mould is dumped on a screen surface so that the sand falls on a conveyor and is removed while the casting is taken from the screen and placed in a metal box or on the floor. Again it may be an elaborate cabinet with mechanical movements which hold the flash and the casting while the sand is removed to the conveyor below and the dust is pulled out both below and above.

Most mechanical shakeouts are vibrated in some manner. Some ventilation is usually installed to remove most of the dust. **Where no ventilation is installed all men in the vicinity including the crane operator, are subjected to undue exposure. They should wear respirators.**

Shakeout ventilation may be accomplished in several ways. To be efficient it must take both the dust rising with the steam and heated air and the cloud formed when the sand falls through the shaking apparatus on the conveyor belt. Dust will escape at every opening unless sufficient suction is maintained to prevent it.

Dust control apparatus, vacuum cleaning equipment, respirators, masks, helmets are all used to control the dust problem.
This article completes the series pointing out dusty operations in foundries.

Cleaning Room

The methods of cleaning castings in a foundry vary. In some plants manufacturing small castings, the gates are knocked off before they are removed to the cleaning room. Then all that is necessary at the tumbling mills is to dump the castings in and start the machinery. When the mills are properly ventilated either through the trunions or by an exhausted cover, there is little dust in the operation. Those pieces too fragile to be cleaned by agitation in a mill, frequently are placed on a revolving sand blast table. Such equipment, if kept tight, does the work well and creates practically no hazard. Many times the sand blast table is allowed to get out of repair and does produce a definite health hazard. In some cases, sand is used as the cleaning medium, in others, metal grit. In the case of metal grit, only the sand removed from the casting will produce the hazard while when round sand is used, leakage allows both the sand from the casting and that broken down in the erosion process to get into the atmosphere. Many other types of equipment of the same nature such as tumblers and airless machines are used for this pur-

Foundries

Control Engineer,
Commission

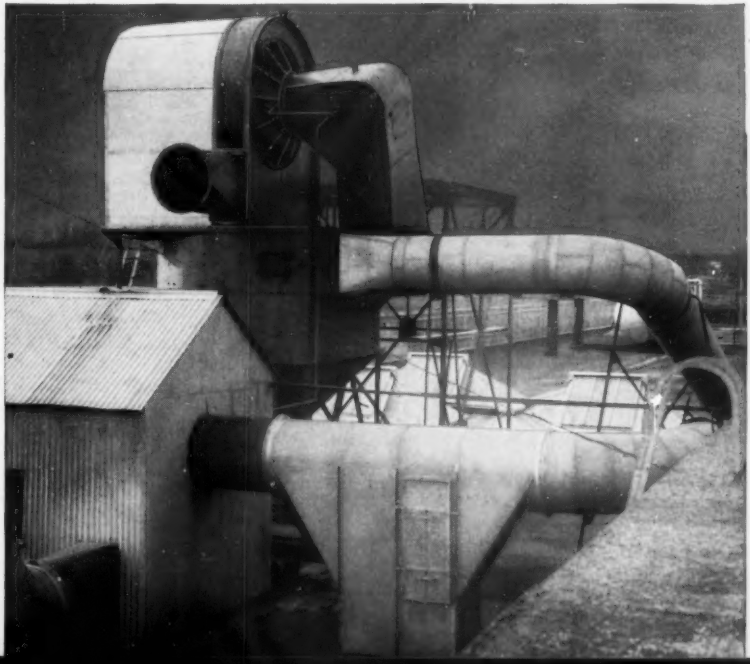
pose. In all cases, if the machinery is kept in good repair it will do its work without causing a dust hazard in the cleaning room. Once it is allowed to become leaky or if the ventilating equipment is allowed to become run-down, or the bag filters are stopped up, the equipment becomes a definite hazard to the workmen in the cleaning room.

Where big castings are involved cores must be removed before the casting can be thoroughly cleaned. Most of this work is done with pneumatic hand chisels. By the time the casting is cold enough for the workman to start to remove the core, the sand is dry. When the sand is disturbed with the chisel, a portion of it becomes dust and floats off in the atmosphere. This operation is a definite hazard to the workmen in most cases. It is recommended that the work be done either in a ventilated cabinet so that the dust will be removed rapidly and the workmen be protected with air line respirator equipment or be required to wear Bureau of Mines approved respirators.

When cores are removed in an open cleaning room the hazard is not only presented to the man who is cleaning the castings but it is spread throughout most of the area. The dust particles are moved by air currents and contaminate a large portion of the cleaning area.

Equipment installed to collect asbestos dust. Similar installations are applicable in foundries.

Photograph courtesy of American Air Filter Company.



Today the man in the sand blast room is well protected. He is furnished with a helmet or a face mask with air line connection. The air supplied to him has been thoroughly cleaned and in most instances has been passed through a water bath giving him the required amount of moisture. It is the man who works outside the sand blast cabinet who often requires protection where none is given. As long as the sand blast cabinet equipment is kept in good shape there will be little or no contamination of the atmosphere outside, but when the exhaust is reduced or the gaskets around the movable table become worn, dust filters out of the room at the air suction openings on the top and around the gaskets on the door or the movable table. Then the dust in the area outside the sand blast cabinet becomes a hazard. Metal shot and grit have been substituted for sand in many of the cleaning cabinets. Then the amount of the silica dust is reduced as only the sand from the sides of the castings is available as harmful dust.

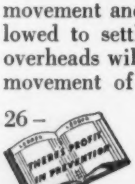
Good Housekeeping Essential

Good houskeeping must be efficiently practiced in the foundry to assist the equipment furnished to protect the workmen from dust. If the floors are allowed to accumulate burned sand, or if the screening of burned sand is done inside the foundry, or if the floors become covered with dry sand, dust will be vibrated into the air through air movement and traffic. Dust that is allowed to settle on rafters and other overheads will be shaken off by wind movement of the building, by extra hard vibrations due to some machinery, or by birds. This precipitates finely divided particles of silica into the room. **Vacuum cleaning devices are used in many plants to remove dust from the floors and the tops of machinery and from the overheads.**

Daily cleaning of floors is necessary. Many plants today oil their floors. This is done especially in the aisleways. A high flash point oil is necessary for this work so as to prevent a fire hazard.

Remove Dust At Source

Removal of dust at its source is considered the best method of control. If the dust is trapped where it is generated, collected and disposed of, it will not be dissipated into the atmosphere where men work. If dusty operations are isolated so that they can be easily exhausted the problem of taking care of dust is simplified. It is necessary to maintain good housekeeping conditions in the plant or dust will be moved into the atmosphere. All personal respiratory protection should be checked over and cleaned continuously by the management in accordance with good practice. Bureau of Mines approved equipment carries directions on each container as how to do this. Management must administer proper supervision over the plant so as to know at all times just what are the conditions in which the workmen must live during their daily routine. Dust control safeguards the health of the workmen and in this way helps to promote his efficiency and improve his morale. A workman off of the job because of sickness delays plant operation and costs the company money.



JOHNSON ANKLE ACTION RUBBER LADDER SHOES
WILL IMPROVE YOUR SAFETY PROGRAM
THEY WILL NOT SLIP
★

Over 10,000 plants are now using them. Endorsed by Safety Engineers everywhere.
Send us a trial order to-day.
★
$1.80 per pair for extension ladders.
JOHNSON LADDER SHOE CO.
EAU CLAIRE, WIS.

G. G. Bobst Named G-E Lighting Specialist

Glenn G. Bobst, formerly with the lighting sales section of the General Electric Lighting Division at Schenectady, N.Y., has been made a lighting specialist for the company with headquarters in Syracuse, N.Y.

Employed by G-E testing department in April, 1934, after graduation from Union College in 1932 with a B.S. degree in electrical engineering Mr. Bobst transferred to the lighting division in 1936.

for COMFORT and SAFETY in Dangerous DUSTS!

Cesco No. 92

Healthguard Respirator

★ This No. 92 Healthguard Respirator has comfort features that invite workmen to wear it. Filter units are shaped and located to allow easy vision—up—down—sidewise. Exhale valve will not catch or rub clothing. Speaking diaphragm permits normal conversation. Large filter areas foster breathing comfort, even when respiration quickens during strenuous toil.

Try it. Approved by U. S. Bureau of Mines for use against LEAD—SILICA (Type "A") and NUISANCE dusts. Write

CHICAGO EYE SHIELD COMPANY
2339 Warren Blvd. Chicago, Ill.

Right off the Docket

The trend of litigation on workmen's health and accident compensation is reflected in these briefs of the latest and most representative cases coming to trial in the intervals between issues. Familiarity with this trend is important to every industrialist

Death of Driver Caused by Hernia Sustained while Turning Wheel

The death of the employee in this case was caused by a strangulated diaphragmatic hernia. The hernia had been sustained when the employee, a bus driver, was cutting the wheels of his bus in order to back it into the garage. The Court decided the facts warranted a finding that this was a "compensable accident," and an award was granted.

Kearns vs Harmony Short Line Motor Transp. Co. et al. (Pennsylvania) 13 Atl. 2nd 923 (June, 1940)

* * *

Strain of Lifting Heavy Drum Results in Compensable Hernia

The employee's regular job was oiling, greasing, sweeping, cleaning and repair work. At the time of the accident he was engaged in collecting and disposing of waste and garbage from the company's premises, and grading the premises. In the course of the work he and two others lifted a heavy drum weighing some 400 to 500 lbs. on to a truck. While engaged in lifting this drum, the claimant felt a pain in the side. The pain grew worse throughout the day, and that night he was forced to go to the doctor. The doctor found that the claimant was suffering from a strangulated hernia, and an operation was performed immediately. About three months previous to this happening the employee had twisted his side, and a small knot developed. The company in this case claimed there should be no award on the grounds that there was no proof of falling or slipping or extraordinary strain, and that the twist suffered months before was really the cause of the injury.

The Court rejected these contentions, holding: Evidence that workman suffered strain while doing unaccustomed work of lifting heavy drum, which either accelerated existing rupture or developed a strangulated hernia authorized recovery of compensation notwithstanding evidence that workman had previously suffered a strain, and lack of evidence that workman slipped, fell or was struck.

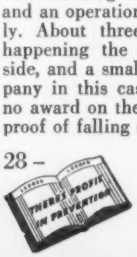
G. L. Baking Co. et al. vs. Wickham (Maryland) 13 Atl. 2nd 771 (May, 1940)

* * *

Removal of Eye, Wholly or Partially Sightless before the Accident, Constitutes "Loss of an Eye" Under Statute

The Court in this New Jersey case reversed the Workmen's Compensation Bureau which had denied an award to the petitioner. Two questions were before the Court: First, was the accident herein involved the proximate cause of the removal of the eye; second, does the removal of an eye which was partially or totally sightless before the accident, constitute "loss of an eye" under the compensation statute? The Court decided:

"Where for twenty years after traumatic injury to eye, employee suffered no pain until washing fluid with which he was washing stairs for employer splashed into eye, causing him instinctively to rub it with his wet hand, and eye was thereafter removed by surgery, accident through which fluid entered employee's eye was the natural and proximate cause of total loss of the eye." The Court held further: "Under the statute



providing compensation for the 'loss of an eye' the word 'eye' refers to the body member 'eye' and not to the function of vision. The removal of a partially or totally sightless eye as the result of an accident in employment constitutes 'loss of an eye' and is compensable."

McCadden vs West End Building & Loan Ass'n (N.J.) 13 Atl. 2nd 665 (June, 1940)

* * *

Award Granted Fifteen Years After Original Injury

In June, 1924, the claimant in this case sustained a compensable injury. He was furnished necessary medical attention and was paid compensation for temporary total disability. In August, 1939, he filed with the Industrial Commission a request for them to determine the extent of the permanent disability which he had sustained as a result of his injury in 1924. Evidence showed that during the intervening fifteen years the claimant had done a large amount of hard manual labor. Despite this the Industrial Commission found that the claimant had a 15% permanent partial loss of his left foot which was attributable to his original injury, and an award was granted for this disability. *Oklahoma Portland Cement Co. vs. Ozment et al.* (Okla.) 104 Pac 2nd 335 (July-1940)

Overexertion Brings Award

The employee herein, worked as a mucker in the employer's mine. On the day of his death he was engaged in removing broken rock that had been shot down in one of the drifts of the mine. Testimony showed that 12 to 14 cars of broken rock was a reasonable quantity for two men to remove during an 8 hour shift. This day the deceased employee and another had cleared away 16 cars during the first 7 hours of work. One of the cars became derailed and while the deceased was attempting to lift it back on the track, he slumped over, and shortly thereafter died.

The Court held that the death was caused by an accident arising out of and in the course of employment. This determination was largely based on circumstantial evidence since the employee's widow refused permission to perform an autopsy so that the exact cause of the death could be found. However, the doctor who had been called to attend the deceased stated that in his opinion the death was due to acute dilation of the heart brought on by overexertion. This, together with the circumstances of the death, was deemed to be sufficient to justify an award. *Industrial Commission vs. McKenna* (Colorado) 104 Pac 2nd 458 (July-1940)

Digested and compiled by
HILTON E. ROBERTS
Member of the Ohio and New York Bars

WHEN THE CALL IS FOR
"A BANDAGE—QUICK!"
Use **Band-me-Quick** new Individual Bandage. Made of Gauztex. Self-adhering gauze sticks only to itself—not to flesh. Medicated pad. 9-inch length. Keeps out dirt yet air circulates freely. No **Throw-Aways.** Each Band - me - Quick cellophane wrapped. **Stays fresh.** 100 to a box. Order from supply house or GENERAL BANDAGES INC., 508 S. Dearborn St Chicago.

GAUZTEX
Band-me-Quick
INDIVIDUAL BANDAGE

Contraction of Typhoid Fever Held Compensable

The claimant was employed as a sewer inspector. While working in a manhole he slipped and fell, and sewage material entered his nose and mouth. About a week and a half later the claimant was stricken with typhoid fever and confined to the hospital for about six months and to his home for two months longer. He filed a claim for compensation which was denied by the Workmen's Compensation Bureau.

On this appeal from the finding of the Workmen's Compensation Bureau, the Court reversed the Bureau's decision and entered an award. The Court said that typhoid resulting from an accident is compensable under the Workmen's Compensation Act; that the facts here warranted a finding that the claimant had suffered an accident arising out of and in the course of his employment, and that the typhoid fever resulted from such accident. *Bobertz vs. Hillside Township* (*N.J.*) 14 Atl. 2nd 495 (May-1940)

New Educational Activity

Use of safety techniques in increasing the efficiency of plant operations in national defense industries will be emphasized in an adult course in industrial accident prevention conducted by the Center for Safety Education at New York University that began September 23, was announced by the director, Dr. Herbert J. Stack.

Edward R. Granniss, director of the industrial engineering division of the National Conservation Bureau, in charge of the course, designed for safety engineers, inspectors, supervisors and others interested in industrial safety work.

The class will also be addressed by a number of other experts in this field. Among who will be H. W. Heinrich, assistant superintendent, engineering and inspection division, Travelers Insurance Company; Harold Bixler, assistant manager, industrial relations department, Union Carbide and Carbon Corporation; and Warren A. Cook, director, department of industrial hygiene, Zurich General Accident and Liability Insurance Company.

"The increasing pace and scope of industrial preparations for national defense are placing greater demands on the knowledge and skill of the men responsible for safe operating conditions and techniques in the nation's shops," Dr. Stack said. "The protection of manpower and machinery is essential at this time when accidents may not only cause increased loss of life and limb, but impede the production of goods and services vital to the country's defense!"

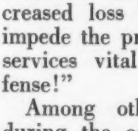
Among other topics considered during the course will be the mechanical, chemical, and personal causes of accidents and the principles of safeguarding against them; industrial health and safety standards; management's responsibility for accident prevention; prevention of man failure and personal protection; engineering prevision and revision; application of mechanical, electrical, and chemical guards; accident analysis, recording, and use of accident facts; safety organization and a program of activities; legal and insurance aspects of accident prevention; accidents and their place in industrial life; and mechanization of industry and the machine age.

Certificates of merit will be awarded to members of the class who successfully complete the work of the course, for which there are no formal entrance requirements.

Goggles Must Be Worn by Maintenance Crew

A carpenter was repairing the flooring in the wire shop when a nail and splinter of wood flew up—the splinter entering his left eye piercing the eyeball and destroying the sight.

Upon investigation, it was found that the men doing maintenance and repair work especially carpenters, were not required to wear goggles, although all other employees in the wire department were required to do so during working hours. The goggle rule has now been extended so that it is compulsory that all employees, except those in the clerical office, are required to wear goggles during working hours.

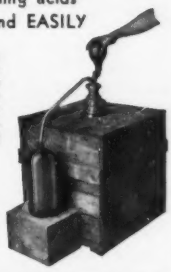


Employees to Get Physical Exams

Physical examinations of all employees, a periodic project of the Nekoosa-Edwards Paper Company, will begin shortly. The last general physical examination of all employees was held about three years ago.

In a great many cases, perhaps in the majority, individuals in Industry never take time to have a physical examination. A periodic physical examination is a necessary safeguard to the health of every individual especially after one has passed the twenties. Often these examinations reveal defects which are easily and quickly corrected if discovered in the early stages, but which may result in considerable discomfort, trouble, and expense if allowed to progress untreated.

Thompson's
PNEUMATIC ACID PUMP
For handling acids
SAFELY and EASILY



Fewer fumes • Full, steady flow • No lifting of carboy • Tubes for various acids • No acid remains in tube • Safe pressure • Empties carboys, barrels and drums.

Write your jobber
or
THOMPSON MFG. COMPANY
Meadville, Pa.

Respirator Adds New Filter Cartridge

American Optical Company, Southbridge, Mass., announces another new filter cartridge for its versatile R-1000 respirator, thereby providing 5 interchangeable types of protection in one basic respirator.

The new filter gives comfortable protection against toxic dusts formed by crushing, grinding or abrading such solids as lead, cadmium, arsenic, chromium, manganese, selenium, vanadium and their compounds.

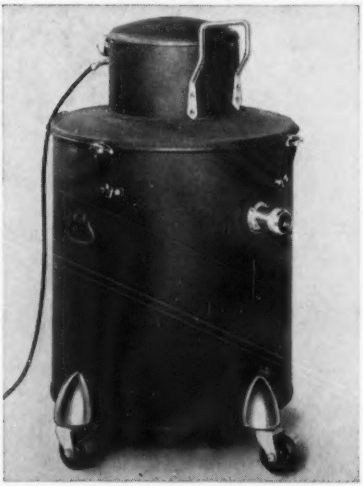
The other 4 filter cartridges announced previously by the optical concern provide protection against: (1) pneumoconiosis-producing dusts like quartz, asbestos, ores, coal, flour, etc.; (2) low concentrations of fumes, vapors or gases encountered in paint spraying, and other light organic vapors; (3) low concentrations of

acid fumes and gases; (4) low concentrations of combined acid-organic gases and vapors.

NEW PRODUCTS

See note on page 34. Additional new products on pages 33 and 34.

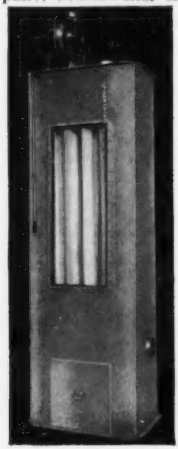
NEW POWERFUL VACUUM CLEANER. Electric Vacuum Cleaner Co., Inc., Ivanhoe Road, Cleveland, Ohio, one of the largest manufacturers of vacuum cleaners in the world, has just introduced two models of a new one-horsepower Premier Industrial Cleaner designed to meet the most exacting requirements of industrial and commercial use.



Model 184 has a two-bushel capacity, Model 184-A, one and a half bushels. Each cleaner has a one-horsepower Universal-type, air-cooled motor. The new cleaners are streamlined for easy portability and storage and all unnecessary gadgets have been eliminated to assure hard service. The Premier Industrial requires practically no attention, not even lubrication. The new type crinkle-finish on the container is durable and long wearing.

The manufacturers of the new Premier cleaner point out that a selection of cleaning tools is available, handling practically all types of cleaning applications.

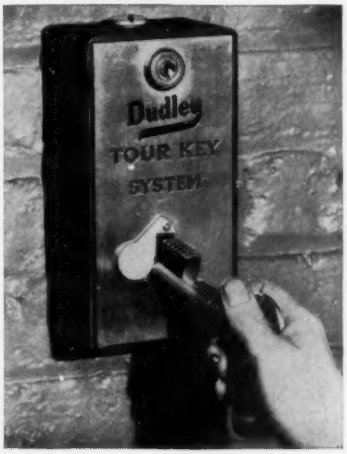
"DUSTUBE" DUST COLLECTOR. A new small assembled type "Dustube" dust collector has recently been announced by the American Foundry Equipment Company, Mishawaka, Indiana. It incorporates the same basic principles of design as the larger assembled and knocked-down type "Dustube" Dust Collectors except that it is equipped with a hand operated shaker and a bin hopper. It is recommended where relatively small volume of air, from 270 to 1440 C.F.M., are to be handled. The equipment is well suited for the collection of dusts created by sand blasting, tumbling, grinding and similar processes.



NEW WATCHMAN'S TOUR SYSTEM. The Dudley Lock Corporation of Chicago has developed a new and more efficient watchman's tour system adaptable to every size and kind of industry. It provides complete mechanical control over the watchman's activities and protects him in case of mishap. It compels the inspection of specific parts of a property at prescribed time intervals; it can flash or permanently record the time of inspection and summon aid in emergencies.

This new system has been examined, tested, and listed by the Underwriters' Laboratories as approved equipment. It earns, it is stated, a substantial insurance discount. Declared by Dudley to be simple, foolproof, flexible and positive, it is inexpensive and costs little for upkeep. The Dudley tour comprises a system of key stations with transmitting stations at start

and finish of each series. The transmitting stations can actuate any kind of signal or recording apparatus. A special clock records, on a long roll of paper, the date



and the exact time each transmitting station is visited. An additional service is the delayed alarm, which gives a warning at any specified location when a transmitter box is not visited within a given time period.

DUST PAN ON WHEELS. A shop clean-up cart that functions like a dust

pan on wheels is announced by the Palmer Shile Company, 7100 W. Jefferson Avenue, Detroit. It outmodes the wheel barrow and shovel method in cleaning up accumulations of dirt and trash. Mounted on ball bearing rubber-tired wheels, with a capacity of more than a bushel, it is easily handled and greatly simplifies the rubbish handling problem. Price is $9.50 F.O.B. Detroit.

STORAGE BATTERY FOR FLASHLIGHTS. A rechargeable flashlight battery similar in principle to the well known automobile storage battery is announced by the Ideal Commutator Dresser Company, 1920 Park Avenue, Sycamore, Illinois.

Although small in size to fit all popular two cell, 1½" size D flashlight cases, it is proven through actual heavy duty service to be dependable, long lived and economical.

An ingeniously arranged chamber and vent, plus semi-fixation of the electrolyte makes it spill proof. The plates are over ¼" thick and connected to terminals by reinforced electrodes so that the battery is rugged to withstand rough handling. The case is of transparent Lucite.

ELECTRIC HOISTS. Shaw-Box Crane & Hoist Division, Manning, Maxwell & Moore, Inc., announce the addition of two new hoists to their "Load Lifter, Jr." line—the first sizes of which were first offered to Industry three years ago—one of 500 pounds lifting capacity, the other of 1,000 pounds capacity.

These hoists are of the low head room type built for heavy duty service, and are of the wire rope and drum type.

HEAD AND FACE PROTECTOR. A new development offering complete coverage to the face, head, neck, and shoulders from splashes and sprays of acid, oil, alkali and other foreign substances is announced by the Industrial Products Company, Philadelphia, Pa.

Frame construction of strong but light weight aluminum into which is fitted a replaceable front of transparent acetate offering full vision in all directions. The hood and cape attaching to the aluminum frame is of Neoprene oil and acid resisting synthetic rubber with vulcanized seams. Cape is full cut so that mask may be thrown up over the head when wearer is not exposed to the hazards.

M.S.A. AMMONIA MASK. Announcement has been made by Mine Safety Appliances Co., Pittsburgh, Pennsylvania, of a new descriptive bulletin on its popular M.S.A. Ammonia Mask. The M.S.A. All-Vision Facepiece has been added to the mask as standard equipment. This new lightweight facepiece features greatly enlarged lens area with complete vision through all viewing angles, yet avoids waste areas of glass.

The lenses are of laminated shatterproof glass, contoured at the sides to fit the wearer's face. Built-in fog-proof construction assures that incoming air will keep

the lenses clear of condensation at all times. Reduced dead air space inside the facepiece cuts down rebreathing of exhaled air. The complete mask consists of the facepiece, ammonia canister, flexible tube which connects canister with facepiece, and a light harness which straps canister to worker, leaving hands free at all times. It is said to combine excellent wearing comfort with complete protection against ammonia fumes.

TOOLS WITH INSULATED HANDLES. A new tool for use in the cutting of electric wires is the small size Porter Bolt Cutter with *Cohardite* Insulated handles. They are tested to withstand a full 20,000 volts.

The tool is ideal when used in emergency work to cut live wires that may have been damaged by storm or other causes. It also protects the workman who might accidently cut into a live wire.

Additional information and descriptive literature on any of the products mentioned in this service department may be obtained by writing **Dept. N,** OCCUPATIONAL HAZARDS, *812 Huron Road, Cleveland, Ohio.*

Statements made in connection with any product mentioned in this service department are based on manufacturers' claims. Although these claims are believed to be true, this magazine does not guarantee that to be the case.

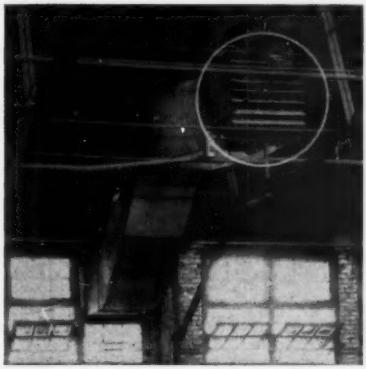
Stove Manufacturer

(Continued from page 11)

unsafe conditions and suggestions for their correction are listed. The reports are then checked at General Safety Committee meetings and approved as complete or entered for further action.

First Aid Department

An efficient first aid department with a full time man in charge is

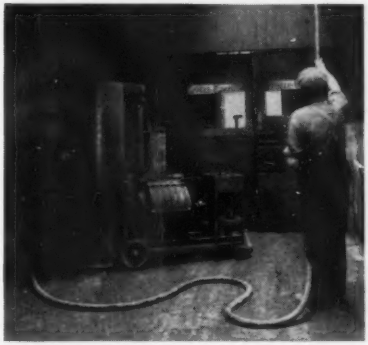


White circle indicates location of a ventilating fan.

a vital part of our safety organization. He is responsible for issuing goggles, respirators, safety shoes. He fits the goggles to an employee and has him sign a receipt for them. This receipt is placed on file and we have a definite record of delivery and a promise to use them. He also keeps the goggles in good repair. Respirators are issued to employees who must return them at closing time. All respirators are thoroughly sterilized daily. Safety shoes are also handled in the first aid department and all employees are urged to purchase them for protection against foot injuries. The attendant makes daily inspection trips through the plant, locates places where goggles should be worn and reports any unsafe practices or safety order violations. He keeps a close check to the physical condition of employees and if ill, advises them to go home.

No. 4—Another important factor in accident prevention is strict and continuous enforcement of all Safety Rules. All of our employees have received notices that violations of safety rules are subject to discharge or lay off. We establish a definite set of rules for certain hazardous operations and then have the employee sign them so that he cannot deny knowledge of them. Example—Employees handling acid must wear goggles, rubber gloves, acid proof jacket and use Safety cradle for carboys.

In the foundry, every molder must be equipped with molder's shoes, leggings and goggles before he can take any iron at the spout and every shifter must have goggles and leggings before he starts the floor. During the pouring period no one is allowed in the pouring zone without full protection—shoes, leggings, and



Industrial vacuum cleaner used to control floating atmospheric dust.

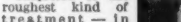
PAUL* NOW KNOWS WHAT IT MEANS to HAVE

* Paul is an auto worker living at 811 Bagley, Detroit. He says, "It's as easy for me to clean up now for an evening as any of my white collar, pen-pushing friends." My wife says, "Your hands don't look like a Grease Ball's any more."

happy hands

Paul's hands before and after using PLY for a month—subjected to the roughest kind of treatment — in grease, oil and gasoline—handling metal parts and tools every working day of the week; he never knew what it was to have comfortable hands until he started using PLY.

Paul applies PLY twice a day: When he starts work in the morning—he cleans up for lunch, then makes another application for the work in the afternoon.



Send for 44-page booklet, which describes the use of PLY as a Skin Protective from: 1. Paints, lacquers, greases, etc. 2. Oils, cutting compounds, petroleum distillates or solvents, etc. 3. Acids and alkalies, etc.

The Milburn Co.
907 Henry St., Detroit, Mich.

goggles.

No. 5—New employees are given careful consideration by our Safety Department. A new employee has not been involved in a lost time accident for more than 5 years.

The goal of all this health and safety activity is the safeguarding of the physical well being of every Monarch employee. The results justify every effort we have ever made to improve our record and at the same time working conditions for our employees.

Six Fundamentals Requisite to Safety Success

1. You must believe in Safety.
2. You must recognize your personal responsibility in accident prevention.
3. You must be active and not passive.
4. You must be a leader in impressing those under your jurisdiction, or those with whom you associate, of your sincerity in Safety, letting it be known that the violation of Safety Rules and the performance of improper practices will not be tolerated.
5. You must have an intimate knowledge of accidents in your company as to number, causes and the remedies applied.
6. With the knowledge that good safety records have been achieved in every department and in all classes of industrial organizations under and all conditions, you must believe in your ability to prevent accidents, recognizing that what others can do you can do.

Safety Shoes Take 800 Pound Shock

"While changing the windings on a fifteen-ton capacity air conditioning unit on installation, the compressor slipped off of the skid on to the toe of my safety shoe. If it had been any other type of shoe, today I would be without two or more toes. The compressor did not fall directly on my foot, but a glancing blow. As you can see by the mark on the toe cap."

This note was tucked inside a safety shoe and was laying on my desk one morning. I think it an appropriate way for the fellow to express his appreciation of safety shoes.

The Staley Journal

Educational Film for Prevention of Industrial Eye Accidents

How eye accidents are prevented in industry, through education of workmen and the use of goggles, masks and other protective equipment, is dramatically portrayed in "The Eyes Have It" a new sound slidefilm sponsored by the National Society for the Prevention of Blindness.

Combining humor with a serious presentation of the factors responsible for eye accidents in industrial plants, this educational film is intended for groups of workmen and foremen as well as safety directors. It was produced and directed by Harry Guilbert, a member of the Industrial Advisory Committee of the National Society for the Prevention of Blindness. Mr. Guilbert is Director of the Bureau of Safety and Compensation for the Pullman Company.

The tragedy of blindness resulting from carelessness is contrasted with the absence of eye injuries where hazards are recognized and a continuous safety campaign is conducted. The importance of the problem, which is presented graphically and simply in this film, may be judged from these facts:

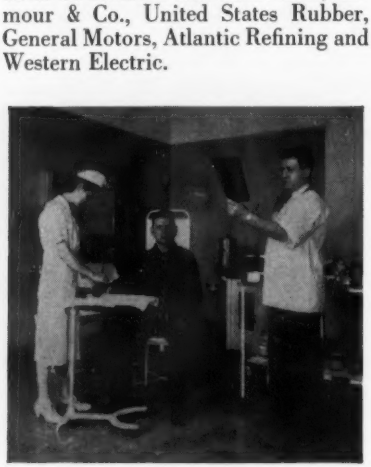
There are in the United States today close to 8,000 persons who have been blinded by the eye hazards of industrial occupations and more than 80,000 persons who have lost the sight of one eye as a result of these hazards. To this total there are added each year at least 75 persons who lose the sight of both eyes and 2,000 persons who lose the sight of one eye because of industrial or occupational hazards. The number of men and women in industry who lose permanently part of the vision of one or both eyes undoubtedly runs into tens of thousands each year.

Two shots from the film produced by the National Society for the Prevention of Blindness.

Inquiries concerning the film should be addressed to the National Society for the Prevention of Blindness, 50 West 50th Street, New York City, or the editor, OCCUPATIONAL HAZARDS, 812 Huron Rd., Cleveland, Ohio.

Firm Opens New Dispensary

Expressing his firm belief in the human side of management and industrial relations, Charles E. Brinley, President of The Baldwin Locomotive Works, announced that a new dispensary with complete, modern equipment has been opened at the company's Eddystone, Pa. plant. Covering 1700 square feet, the six-room dispensary was designed after a study of similar facilities provided by such organizations as International Harvester, Armour & Co., United States Rubber, General Motors, Atlantic Refining and Western Electric.



Baldwin's accident frequency last year was 28 per cent lower than in 1938, on a man-hour basis, and the severity of accidents, as measured by working days lost, was reduced more than 50 per cent, Mr. Brinley announced. "We hope," he continued, "to lower still further the number of working days lost through accidents and sickness, thus helping both the employees and the company. Every Baldwin worker has at his disposal both skilled medical personnel and modern hospital equipment.

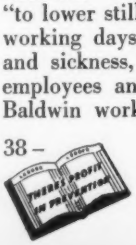
"A full time doctor and registered nurse have been added to the staff, and the dispensary will remain open under the direction of a trained nurse whenever there are night shifts of workmen."

A novel feature of the dispensary is a dental room, where employees, if they desire, may have dental work performed, paying for the service at moderate cost. All other dispensary facilities, as well as emergency dental work resulting from an accident, are available without charge.

Vapor Fumes Fatal

An accident which cost two men their lives, occurred in a Fatty Acid Plant. One of the men was down in a tank in which is acidified crude soap with sulfuric acid, and he was engaged in cleaning out the sludge in the bottom of the tank. His foreman was on the floor above and from time to time kept in touch with the workers. On one of these inspections he noticed the man in the tank apparently overcome and he called to another workman to get a rope; meanwhile he climbed down the ladder into the tank to get the fellow out. The other man came with the rope and more help. By this time, both men in the tank were found to be overcome. In a few minutes, both were taken from the tank and the First Aid Squad worked on them for an hour and forty-five minutes, but they failed to revive.

The company reporting this accident says: "We are not certain what caused the men to be overcome, but we believe it was probably hydrogen sulfide which came from liquor contained in the soap.



Metal-Mining Industry Plan for Health and Safety

(Continued from page 13)

To arrange and hold safety meetings, conduct safety campaigns, and provide for organized cooperative effort looking to:

(a) The prevention of fatalities and injuries and the improvement of the health of all persons connected with the mineral industries.

(b) The dissemination of information and instructions on subjects related to the prevention of fatalities and injuries and the promotion of health.

(c) The promotion of training in first aid to the injured and in the use of oxygen breathing apparatus and other forms of protection in mine rescue and recovery operations.

(d) The closest cooperative relations with existing organizations (including local, state, and federal agencies) which have for their purpose the promotion of health, safety, and efficiency in the mining and allied industries.

(c) The promotion of educational, social, and recreational activities in the mining and allied industries.

Although the Holmes Safety Association is national in scope, it is a purely voluntary association with no paid officers and no costly organization set-up. In accordance with the constitution of the association, the Director of the Bureau of Mines is president of the national council; thus the closest possible cooperation is maintained between the Holmes Safety Association and the Bureau of Mines.

The Holmes Safety Association derives its name from the late Joseph Austin Holmes, an early leader in the safety movement in the mineral industries and first Director of the Bureau of Mines. Dr. Holmes is remembered by many as a kindly, sincere, humane advocate of safety who worked for the legislation creating the Bureau of Mines and who was given the task of organizing the Bureau after the organic act creating the Bureau was provided by Congress. It is entirely fitting that an organization which has for its objectives the aims and purposes of the Holmes Safety Association should bear the name of this man.

General Organization Plan

The general organization comprises local chapters, district and State councils, and a national council.

The District Council

Numerous district councils have been organized in important coal-mining centers in various parts of the country. These councils maintain the activities of the affiliated local chapters. The membership of the district council consists of at least one representative of each local chapter, at least one representative of management at each plant where a chapter has been established, representatives of mining and safety associations, representative of the state agencies interested in the promotion of safety, and representatives of the Bureau of Mines.

The major purpose of the district council is to organize local safety chapters and to assist those local chapters in carrying out their objectives after they have been organized. The district council maintains contact with and supervises the local chapters. Numerous procedures are em-

ployed by the council to make the chapter meetings interesting and instructive, and new ideas and methods are evolved by the district council to insure continued interest and maximum results in safety.

The district council serves the local chapters in various ways. The most important service can be rendered through a program committee of several Council members who may select subjects relating to health and safety work and obtain the services of speakers for chapter meetings. The district council organizes and conducts district safety campaigns and monthly safety competitions and provides trophies to be awarded monthly to the chapters with the best safety records. The council maintains an honor roll of mines that have operated an entire month without a lost-time injury, and arrangements are made to give suitable publicity to these no-injury records. The district council serves as a clearing house for information on recent accidents from which lessons may be learned that will be useful in preventing similar accidents in the future. Some councils prepare safety rules with which to supplement the state mining laws as a special service to the affiliated chapters.

The Local Chapter

After the district council is properly organized, arrangements are made by the council for the organization of the local chapters. The success or failure of the entire plan depends upon the proper organization of these local chapters and the effort put forth by the keyman in the council and chapters to keep the chapters alive and functioning properly.

Each local chapter is organized at a meeting of the employees, together with the local supervisory officials, called for that purpose. The safety chapter plan is carefully explained by a representative of the Bureau of Mines or other competent person, after which the chapter officers are elected. A suitable name is chosen for the chapter and a convenient meeting date and place of meeting are selected. Following the organization meeting, application is made for a chapter charter on a form provided for that purpose.

The principal activity of the Holmes Safety Chapter is the safety meeting, which is held monthly. The usual procedure at the monthly safety-chapter meeting is as follows:

1. Meeting called to order by the president.
2. Reading of the minutes of previous meeting.
3. Report of the safety director.
4. Report of the health director. The health director does not necessarily report at all meetings. It is his duty to give an occasional address on some subject dealing with health, sanitation, hygiene, and prevention of infections.
5. Report of social director.
6. Report of the educational director.
7. Report of the chapter representative on the district council.
8. Report of committees.
9. New business.
10. Safety address.
11. Adjournment.

We do not hesitate to predict a substantial decrease in accident rates wherever Holmes Safety Chapters are established, provided that no similar activity is already in effect and that the chapters are carefully organized and maintained.

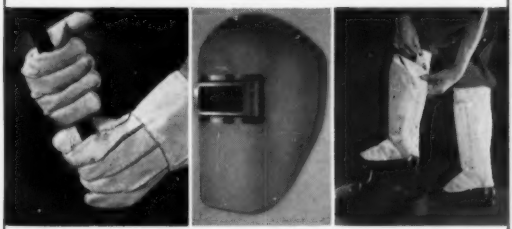
PUT UP THE *American Line of Defense...*

Against All Hazards from Head to Ankles

Improved Ful-Vue Goggle (Pat.). 3 eye and bridge sizes. 6-Curve Super Armorplate Lenses.

Super Duralite-50 Goggle, wide angle vision. Light in weight. Super Armorplate Lenses standard.

R1000 Respirator for Type A Dusts, nonlethal concentrations of fumes, odors. New, double head-band.



AO Gloves and Mittens. Supplied in a full range of styles, sizes, and protective materials.

New 440-4-A one-piece Welding Helmet protects face and neck. Genuine leather sweatband.

AO Safety Leggings. Chrome tanned leather, fire-resisting duck, asbestos. All sizes and styles.

★★ The American Line of Defense against industrial hazards covers all protection requirements from head to ankles. Including goggles, helmets, respirators, hoods, and a complete line of safety clothing, this AO line is backed by unmatched manufacturing facilities and uniformly high standards of quality.

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